Atari Age

March / April 1983 • Volume 1 • Number 6

How Atari Makes a Game Console

They're doing it in Hong Kong, in Puerto Rico, in Ireland, and in Sunnyvale, California. Doing what? Manufacturing Atari units, of course. There are assembly plants around the world to handle the tremendous demand for the Atari 2600, 5200, and three home computer models. To see just how it's done, we visited the Atari manufacturing plant at 1195 Borregas Avenue in Sunnyvale. There we found hundreds of people and some very sophisticated automated machinery busily putting together Atari 5200 consoles.

On one side of the room we saw racks and bins of parts—over 400 individual parts which go into every Atari 5200. In the building next door, completed 5200 units were getting a final test before being shipped out. The process which turns bins of parts into functioning 5200 game consoles goes like this . . .

Getting The Pieces Ready

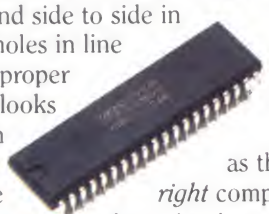
Atari itself doesn't manufacture the individual parts that go into its video game or computer systems. The company concentrates on assembling custom-made and "off the shelf" components into printed circuit boards, the electronic "guts" of an Atari unit, and then putting together the completed units.

The first step in using the flood of parts which arrives at Atari is to perform spot quality checks on each batch. Next some of the parts have to be prepared for insertion in the console. Lead wires have to be formed to fit the printed circuit board and snipped to the proper length and segments of the printed circuit which are not going to be soldered have to be masked off with a water-soluble mask and tape.

Everything In Its Place

Individual electronic parts are put into their places on the printed circuit board in two ways—*auto-insertion* and *hand insertion*. Some parts must be inserted by hand—these are put into individual bins and given to the proper people on the assembly lines when needed. The majority of the components are inserted into their positions on the printed circuit board by machine.

Each blank printed circuit board is placed in the grippers of an auto-insertion machine, which is programmed to shift the board up, down, and side to side in a regular sequence, bringing the proper holes in line with the insertion mechanism in the proper order. The actual insertion mechanism looks something like a stapler head, punching component after component down as the board moves beneath it.



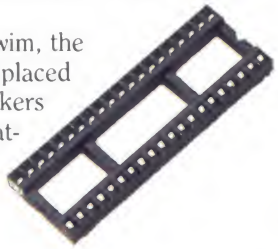
To get the *right* component in line and ready to be "stapled" into place, Atari must first use another programmed machine which takes components and strings them together in a side-by-side kind of electronic ribbon, held together at the edges with adhesive tape. By feeding this "ribbon" into the auto-insertion machine and synchronizing the first component with the first spot on the printed circuit board, 264 different components are put into position in just 55 seconds!

Soldering In Seconds

After auto-insertion, the board moves onto an assembly line, where more parts and sockets are put in place by hand. At this point there are 367 components on the board, ready for soldering. Attaching each component lead wire to the bottom of the board would take hours for some poor soul with a soldering iron, but it takes only seconds the way Atari does it, with a *wave soldering machine.*

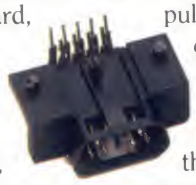
Printed circuit boards are placed onto an automatic feeder belt which passes the bottom of the board over a wave of flux and then a sea of molten solder. All the components are instantly soldered into position!

As they come out of their solder swim, the boards are washed down, dried, and placed on another assembly line, where workers insert components which are too heat-sensitive to survive wave soldering.



Checking It All Out

Finally the board reaches the end of the line. Here it is placed on top of a testing unit. A technician throws a switch and a suction is created under the board, pulling it down onto a grid that makes contact with *every* circuit on the board. The unit tests it all and prints out a report on a skinny slip of paper that looks something like a cash register receipt. If anything does not check out, the report indicates precisely where the problem occurred, and the board goes to a special area where a team of experts fix it and then retest it thoroughly.



From here the completed boards move on to another area where they're placed in the sleek plastic outer shell of an Atari 5200 console. Even at this stage, sample units are taken from the line and tested. And it's not just electronics the Atari inspectors are checking—we saw them reject a unit because of a scratch in the case which we *never* would have noticed!

Finally, consoles and controllers, power adapter and switchbox, instructional manuals and a *Super Breakout* cartridge are all packed into boxes and are ready for shipment—almost. Having performed quality checks every step of the way, there's *still* room for one more, and several boxes are taken off shelves of completed, packed units to be opened and fully checked out as a final step before the Atari units are ready.

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GALAXIAN

LOOK OUT BELOW!

All the swooping, soaring, fast-blasting action of **Galaxian** is now available for your Atari system!

Row after row of colorful enemies hover menacingly over your laser base. They hesitate, then descend in attack formation, darting and circling, daring you to hit them before they hit you.

One of the most popular arcade hits of all time is home at last—only from Atari!

COMING IN APRIL

Club member price: $26.95

YOUR TURN

The Atari Club Reporters have come through again with a terrific collection of playing tips, news reports, cartoons, artwork, and other goodies. If you'd like to join our talented staff, just send your contribution to the Editor, Atari Age, 1700 Walnut Street, Philadelphia, PA 19103. If we publish your work, you'll receive an Atari Game Program cartridge. And everyone gets a very sincere thank-you from yours truly.

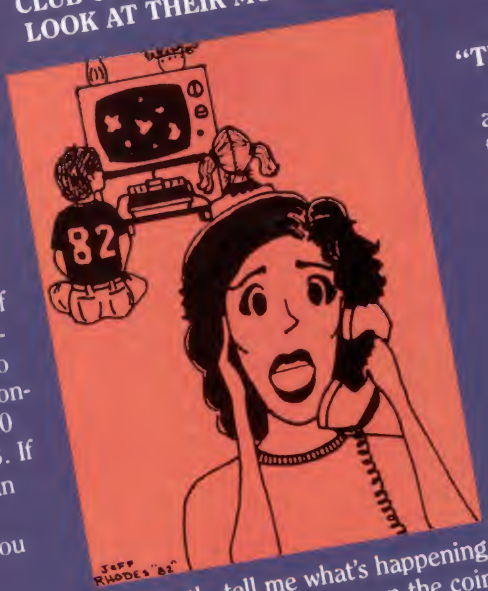
S Sx

HOT SHOT DEFENDER TIP

I have noticed that while playing the "Defender" cartridge, every time you fire, your ship disappears for an instant. This leaves you immune from enemy fire. I have found this is a useful way of destroying Baiters. If you time it so that you fire the instant they are going to hit you, they will pass through you. Then they pause for a little while. This enables you to reverse quickly and destroy them.

from Aaron Watkins, Hobart, OK

CLUB CARTOONISTS LOOK AT THEIR MOMS



Quick, Ruth, tell me what's happening on the soap opera! The kids won the coin toss today!

from Jeff Rhodes, Baden, PA

"THE BALLAD OF ATARI"

Donald Green of Knoxville, TN sent us a complete set of very funny lyrics sung to the tune of Kenny Rogers' hit song "The Gambler." We don't have room for his whole creation, but we do want to share at least the first verse and the chorus.

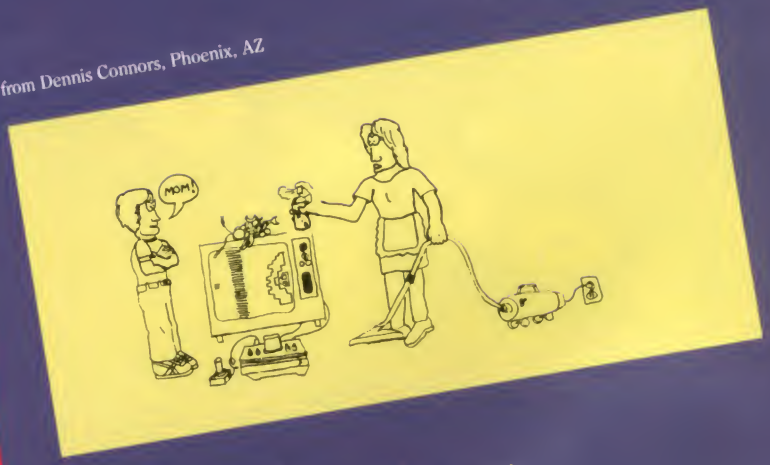
On a warm summer evening,
I was playing my Atari.
Met up with a good friend,
We were both too excited to stop.
So we took turns a'playin',
On the screen of my T.V.
Then the aliens defeated us,
So he began to speak.

(chorus)

"You've got to know when to blast 'em,
Know when to dodge 'em.
Know when to drift away,
And know when to thrust.
You never count your points,
When you're firing at the bad guy.
There'll be time enough to count 'em,
When the game is done.

from Jeff Rudd, Rochester, MI

from Dennis Connors, Phoenix, AZ



SPECIAL THANKS . . . for their outstanding Cub Reporter contributions go to Anthony Confessore, Nutley, NJ; Kurt Blaettler, Lisle, IL; Robert McCune, Belmont, MA; Steven M. Brown, Seattle, WA; Mike Bloesch, West Helena, AK; Chris Dolberry, Clifton, NJ; Dave Hanrahan, Woodbury, NJ; and Milan Gupta, North Warren, PA.

Captain's Log

There are plenty of surprises waiting for you in this issue of *Atari Age*.

Start with a super group of new Atari games, including two more RealSports games and two arcade classics—*Galaxian* and *Centipede!*

So far, so good . . . but what's happening that's special for Atari Club members? Glad you asked! Start by flipping the magazine open to the center spread. There's a little present waiting there for you—a big full-color poster, just for Club Members! We thought the wonderful fantasy artwork that Randy Barrett created for the *Phoenix* cartridge would make a great poster—and as you can see, no sooner said than done!

For those of you who didn't order your *Crazy Climber* in advance, this would be a good time to get in on this Club exclusive. By the time you read this, the cartridges should be available—but *only* to Atari Club Members. *Crazy Climber* is not being sold at any store now, and it is not currently on the schedule for general release. This means that, unless Atari changes its plans, we've got this terrific home version of a hit arcade game all to ourselves!

And one more bit of news about our Exclusive Cartridge Introduction—we have *another one* in the works for next issue! This time it's a game which is totally different from any other home video game on the market—and *that's* not easy! Tune in to the next issue of *Atari Age* for all the details about this upcoming Atari Club Exclusive!

Steve Morgenstern

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Game-Grams

Dear Atari Club,

I am writing to ask if you can make a little section in the Atari Age magazine of the high scores for us Atari owners to try to beat. If you do, my high score on "Yars' Revenge" is 1,247,000 at Level A.

Jason Conde
Ashton, ID

Nice score, Jason! And nice idea, too . . . but there is a problem trying to keep track of high scores on Atari games. In nearly every game, when you get a high enough score, the display "rolls over'—that is, it goes back to "000" and starts over again. That means you could send us a photograph of the TV screen after a great game, and it could show a score of "100," when you really scored 1,000,100. That's why we've decided not to list high score claims in *Atari Age*—there's no way we can prove that the reported scores actually took place.

We are adding a new high score feature in this issue of the magazine, though. Atari's coin video division keeps track of the record high scores on most of their arcade games, and issues official records. You'll find the latest records listed on page 18. We'll keep you up to date on new high scores in future issues.

—Editor

Dear Atari Club,

My friend recently bought an Atari and has seen my Atari Age magazine. He really enjoyed the magazine and wondered how he could join. Could you please tell me how?

Mike Rubin
Holtville, CA

We're always happy to welcome new members to the Club. Anyone who owns an Atari game unit (2600 or 5200) is eligible to join. Just send us your name and address, the serial number from your Atari console (it's on the label on the bottom of the unit), and $1.00 for a year's membership. The address for membership applications is The Atari Club, P.O. Box 14064, Baltimore, MD 21203. That's all there is to it!

—Editor

Dear Atari Club,

I am thinking about becoming a video game designer when I get older. What kind of education would I need?

Garth Dickey
Jamaica, NY

Your question led to a very interesting discussion with George Kiss, Director of Software Development for Atari. George does most of the hiring of game designers, and he says that it isn't formal education that makes the difference—it's ability. At the present time there are Atari game designers with Ph.D. degrees in Computer Science, and others who are essentially self-taught programmers, without even a high school diploma.

Now that doesn't mean that the route to a job in video game design is dropping out of school! The skills Atari looks for are programming ability and, most importantly, imagination. In the past, the kinds of programming it takes to create a hit video game have not been taught widely in schools. George says that is changing now, though, as more colleges begin offering courses in relevant areas, like computer animation. He expects to recruit several programmers right out of college or graduate school this year.

To pursue your goal, learn as much as you can about programming. On the academic level, that means taking courses in Computer Science. Whether it's in school or on your own, you'll have to learn assembly language programming. That's a form of computer coding which is more complex than the Basic language that most people start out with. Just about every video game you see on the market was created using assembly language programming.

Once you have a firm understanding of how to make a computer do what you want it to, the best way to break into the business is to develop a game of your own, to show off your abilities.

Good luck!

—Editor

SOLUTION SECTION

This is going to be a "Good News—Bad News" Solution Section.

First the good news. We can tell you without fear of contradiction the winner of the "Picture Clues" Contest which appeared in the November/December issue of *Atari Age*. The grand prize of an Atari 5200 Game System goes to John Mutch of Canton, MI. John's correct answers were 1) Defender; 2) Home Run; 3) Night Driver; 4) Video Pinball; 5) Missile Command; 6) Human Cannonball. The second, third, and fourth prize winners have all been notified by mail. Congratulations to all!

Now, about that bad news. We've decided to hold off a little longer on announcing the winner of the "Seen in a Sign" contest. As we mentioned last time, there was a lot of confusion about the rules on that one, and we've decided to check with our legal advisors before announcing the winner. Please *don't call us* to ask—we'll be contacting the winners directly as soon as they're determined, and their names will appear in the next *Atari Age*. Sorry about that!

Help Now Available For "Raiders" Players

No question about it, *Raiders of the Lost Ark* is a *very* challenging adventure game. For many players, that's what they love about it—this unique game requires real concentration and creative thinking to solve the puzzle and recover the elusive lost Ark of the Covenant. But if you've reached the point where you need some help, we've got good news. Atari is coming to the rescue in two ways.

First, you can request a special tip sheet with seven helpful hints on solving the *Raiders* mystery.

And what if you're still stuck even *after* the hints? You can now get a solution to the *Raiders of the Lost Ark* game from Atari. It's a complete step-by-step guide to reaching the Ark, though, so don't ask for it unless you've absolutely given up on solving this mysterious cartridge without assistance.

The tip sheet and the game solution are both available from the raving lunatic in the Black Market if you bribe him with a parachute and a . . . only kidding! All you have to do is make a toll-free call to Atari Customer Service at 800-538-8543 (in California call 800-672-1404) and they'll send the information you request free of charge.

ATARI INTRODUCES POWERFUL NEW COMPUTER. Combining sleek, ultramodern styling with a full 64K RAM memory (the largest ever for an Atari computer), the model 1200XL home computer has just arrived. New features include 12 programmable function keys and a "help" key to give users additional information if they need it while running a program.

Another Great Summer Ahead for Atari Computer Camps

"It really broadened my mind in terms of computers. It gave me something to work with for the rest of my life, and I can't wait to go back."

That's how 13-year-old Evan Katz described his experience at Atari Computer Camp last summer. Evan and dozens of other young people aged 10 through 16 enjoyed all the usual sports, games, and activities found at a regular sleepaway camp, plus a unique computer education experience. And for summer 1983, Atari has expanded the Computer Camp program to seven campsites nationwide, with a revised and expanded computer learning program based on the experiences of last summer's campers, and a choice of two-, four-, or eight-week sessions.

Atari Computer Camp means team sports, tennis, swimming, arts and crafts, barbecues, campfires, sing-alongs and movies. It also means Basic and Pilot, a small computer-controlled robot called a Terrapin Turtle, a speech synthesizer that campers can make talk, and an in-depth computer curriculum segmented to meet the needs of young people who have never touched a computer keyboard before, and those who are well on their way to becoming computer experts.

To receive two full-color brochures describing the Atari Computer Camps and the camp locations for 1983, write to Atari Computer Camps, 40 E. 34th Street, Department AA, New York, NY 10016, or call 1-800-847-4180 (in New York State and Canada call collect 212-889-5200).

New from Atari: Service Contracts

There's a new way to take the worry out of repairs for your Atari system—a comprehensive Atari Service Contract which guarantees perfect operation of your game console and controllers for a full year.

Contracts are available for your Atari 2600, your Atari 5200, or your Atari home computer. A contract entitles you to any parts and labor you need throughout the year. Atari Service Contracts are honored at Atari Service centers nationwide.

As a special introductory offer, you can protect your Atari 2600 for a full year for just $19.95 (regular price is $24.95). Your Atari 5200 SuperSystem can be covered for just $39.95 (regular price $49.95).

You can purchase your Atari Service Contract at a special low introductory price by calling toll-free 1-800-847-4404 (in CA call 800-847-4407).

New Cartridge Report

RealSportsTennis

Waiting for a video tennis game that **really** has the feel of center court tournament play? Your waiting is over—**RealSports Tennis** has it all!

Start with terrific graphics. Beautifully animated figures run across the court at your command. The ball flies and bounces realistically, right down to the shadow on the court below. There's even a great-looking professional-style tennis scoreboard keeping score according to regulation tennis rules. And the first thing you do in each game is actually **put your own name up on the scoreboard!**

RealSports Tennis gives you more than good looks, though. You have total control of the game! Choose from three different shots—a regular return, a lob, or a wicked smash. Learn to angle the ball off your racket just the way you want. And at advanced play levels, you must time your racket swing by pressing the red firing button at just the right instant, for a return with pinpoint accuracy.

Now **that's** real tennis excitement!

RealSports Soccer

Ready for realistic rough-and-tumble video soccer? Then plug **RealSports Soccer** into your Atari 2600 and **get moving!**

You've got three men on your squad, working the ball upfield with fancy footwork and well-placed passes. Get into position for a shot on goal, but **watch out**—the defensive men have the speed advantage. Their fast feet can steal the ball and take off for their own goal in the blink of an eye!

The sounds and sights of real soccer are beautifully recreated in this dramatic sports contest. The shrill referee's whistle blows as you kick off, and the crowd cheers appreciatively as the action picks up. The players run, dodge, bluff, pass, and kick on goal with superbly animated movements, as the on-screen clock ticks away precious seconds.

Players choose between two different game lengths, three different skill levels, and two-player competition or man-against-computer contests. No matter which variation you're playing, it's easy to get caught up in the non-stop action. In fact, even though all the running happens on your TV screen, we'll bet you find yourself breathing hard after a hard-fought session on the **RealSports Soccer** field!

Centipede

Many video games have been copied or imitated, but there's only one **Centipede**. Your shooter maneuvers in the bottom quarter of the screen as deadly spiders scoot through in crash-attack patterns. A many-segmented centipede winds its way down through a field of mushrooms as you fire away from below.

Think you're doing well? Look out! Here come the fleas, adding more mushrooms to the screen. And then out comes the scorpion, poisoning rows of mushrooms. If your centipede hits a poisoned mushroom it goes crazy, heading **straight at you** down the screen!

True to the arcade original, **Centipede** progresses from the first level which starts with a single long centipede to tougher levels with additional fast-moving centipede heads invading the screen. And don't let any of them reach the bottom! Still following arcade rules, an extra head will appear whenever any part of the centipede reaches the bottom of the screen.

For fast-action fun, let some bugs loose in **your** home with Atari **Centipede!**

Galaxian

It's a name to strike fear in the hearts of peace-loving video game players everywhere—**Galaxian!** So far, the ruthless waves of Galaxian invaders have been confined to arcades, where they have enjoyed incredible popularity. But look out—now they're headed for our homes!

In **Galaxian** you control a missile laser base on the ground. Overhead a battle fleet of Galaxian invaders appear. They make a fierce-looking enemy—six rows deep, seven ships across, brightly colored and ready for action! Without warning they attack, flying in complex patterns as they swoop down to blast your base. They don't care **how** they blow you up—if their bombs don't connect, they'll try to ram right into you! And if they miss on one bombing run, they return to their formation and wait for the next attack.

There's more to high-scoring **Galaxian** play than simply blasting the enemy. The really **big** points come for destroying the larger flagships while they're in flight. They attack with one or two escort ships. The ultimate maneuver—knock out both escort ships, **then** the flagship. Watch out, though—it's a tricky piece of marksmanship. And even when you succeed in eliminating one wave of attackers, another will take its place. You see, there are **99** attack waves in **Galaxian.** Now **there's** a test of your shooting skill!

SNEAK PEEKS

NEW ARCADE GAME ADAPTATIONS RANGE FROM STEAMY JUNGLE TO ICY ANTARCTIC

Join us now, intrepid Atari adventurers, as our fearless expedition takes off for some of the most dangerous spots on the globe. We'll travel from the heart of darkest Africa to the icy wastes of the Antarctic. Our mission—capture some of today's greatest arcade games for Atari to adapt for its home video systems.

Let's start in Africa. We push on through the dense underbrush, ever alert for wild beasts when . . .what's that sound? Who is that figure swinging through the trees overhead? Eureka, we've found our first new game—JUNGLE HUNT!

In this action-packed game, the jungle explorer must rescue his girlfriend taken prisoner by hostile natives. To reach her, he must first swing through the vines, then swim through a crocodile-infested river, climb a mountain while dodging bone-crushing rolling boulders, and finally jump right over a band of spear-carrying cannibals. JUNGLE HUNT (based on "Jungle King,") is currently one of the most popular coin video games in the country—and Atari will have home versions for both the 2600 and 5200 systems ready by summer. But now it's time to head for the other side of the world, explorers, so put away your pith helmets and lace up your mukluks—we're going to confront the frozen South Pole. This time we're searching for penguins.

Actually, it's one particular penguin we're after, one who has demonstrated some very strange behavior. And there he is—out there on the ice. It's PENGO. He's trying to line up those floating chunks of ice. Looks like he's going to make it. But wait—what are those flying things headed his way? They look like . . . they are! The dreaded Sno-Bees! Now Pengo really has his hands . . . er, flippers full. So turn up the thermostat and throw another log on the fire—Atari plans to bring this polar pleasure out of the arcades and into our living rooms later this year.

Well, explorers, that's it for our Sneak Peek expedition this time. But don't put your gear in mothballs—you'll need it again next issue. We've got another trip planned—and rumor has it, our destination is **the moon!**

GOOD GRIEF—CHARLIE BROWN IS COMING TO ATARI!

That's right—good old Charlie Brown and his PEANUTS® pals have joined the Atari celebrity line-up as stars of their own video games. Atari's designers are now busy turning some of our favorite comic strip scenes into video games which let loyal PEANUTS readers become part of the action.

How would you like to be Snoopy, soaring through the clouds in pursuit of the dreaded Red Baron? Or you could be transformed into Charlie Brown himself, trying against all odds to be the hero and **not** the born loser. That's what we have to look forward to in Atari's first two PEANUTS games, tentatively scheduled for fall 1983.

DISNEY JOINS ATARI KIDS' LIBRARY

Have no fear, Mouseketeer, Mickey and his friends are here! Atari has just signed an agreement with Walt Disney Studios to create entertaining video games starring everyone's favorite Disney characters.

In the works right now—**The Sorcerer's Apprentice.** Based on an episode in the classic film **Fantasia, The Sorcerer's Apprentice** is a multi-screen game featuring Mickey Mouse himself as the overeager magician's assistant. First Mickey takes aim at a sky full of blazing shooting stars with his magic wand. Then it's on to the battle of the brooms, a magical confrontation just like in the movie! The cartoon-style graphics completed so far look astounding!

The Sorcerer's Apprentice is tentatively scheduled to join the Atari Kids' Library in mid 1983, with more Disney fun to come soon after.

THERE'S A TEMPEST BREWING FOR THE ATARI 5200

They said it couldn't be done—that the fantastic color Quadrascan graphics of Atari's revolutionary coin video **Tempest** game could never be brought to the home video screen. Well, Atari designers now have all the state-of-the-art sophistication of the 5200 Game System at their disposal, and with it they are conquering the challenge of bringing **Tempest** home.

Technically minded video game fans will appreciate how tricky this kind of adaptation really is. Games with solid-line graphics, like **Tempest** and the brand new Atari release **Quantum** create a computer image with **vector scan graphics**—the computer plots two points, then draws a line between them. That's not the way your TV screen works, though. It uses **raster scan**—each line across the width of the screen is drawn one at a time. It's tough to give a raster display that crisp vector-scan look, but Atari's designers are hard at work on it now, and reports from the lab indicate that it's working. Estimated time of arrival—summer '83. We'll keep you posted.

JOIN THE REA

GET YOUR OFFICIAL H

RealSports Tennis! RealSports Soccer!

Two more terrific games in the unbeatable RealSports lineup!

RealSports games give you:

- Lightning-fast gameplay!
- Plenty of sports action and sports strategy!
- Superb sound effects!
- Incredibly detailed graphics!
- Choice of one or two player games!
- Control that's precise and easy to learn!

LSPORTS TEAM!

AT ABSOLUTELY FREE!

NEW

RealSports TENNIS Video tennis with the feel of real on-court action—that's RealSports Tennis!

Lob a shot while you move into position. Take careful aim and place your shot at the baseline. Then charge the net and smash a hard return past your opponent for the winner!

There's even a professional-looking scoreboard that displays your name during the match! It's like center court at the Open every time you play RealSports Tennis!

RealSports TENNIS
April Release $26.95

NEW

RealSports SOCCER The clock is running down, and you're down by a point!

You cut in front of an opposing player and steal the ball. A quick pass to your teammate downfield. He has a shot—GOAL!

Only seconds left. The referee blows his whistle. The other team kicks downfield—you can get to it if you hurry! You have it! An enemy player tries to block you, but you swing around and make a quick, short pass to your teammate coming up from behind. He charges forward, close to the goal . . . closer . . . he kicks . . . it goes in . . . the crowd goes wild. YOU WIN!

It's a pulse-pounding RealSports Soccer victory!

RealSports SOCCER
April Release $26.95

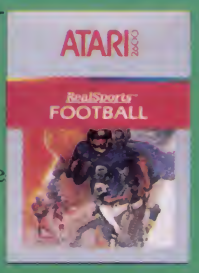
AVAILABLE NOW!

RealSports BASEBALL

You control all the realistic baseball action, both in the field and at the plate. Choose from four different pitches! Batters bunt or swing away to right, left, or center. Fielders choose where to throw the ball to make the play. Baserunners can even try to steal extra bases! $26.95

RealSports FOOTBALL

You have a five-man team and a full 100-yard scrolling playfield—this is a real football challenge! Offense, try an end sweep, or a short fleaflicker pass, or go for the long bomb. Defense, call the blitz, or line up to block and tackle against the short or deep pass. And keep your eyes open for an interception! $26.95



RealSports VOLLEYBALL

Everybody out on the beach for an action-packed volleyball game. The players look incredibly lifelike—they run, leap, lob a serve to an undefended corner, pass to their teammates, and smash the ball over the net for a winner. Joystick moves the players—red firing button moves their arms for precise ball control. $26.95

FREE HAT WITH ANY REALSPORTS ORDER!

Wear your official RealSports team hat with pride—it's yours *free* with any order of a RealSports cartridge from The Atari Club. This handsome sports cap has cool, comfortable nylon mesh back and sides. A big knit sun-blocking brim makes it as practical as it is good-looking. And it's fully adjustable—one size fits all. Whatever your sport—indoor or outdoor, athletic or electronic—you'll look great in your RealSports hat! Offer expires May 15, 1983—order today! Limit one hat per order.

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Offer Expires May 15, 1983.

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THE CONVENIENT MAIL-ORDER FORM

GUINESS

by Stephen Topping

RealSports video games can capture the action, excitement, and gameplay of real sports competition—but *not* the strangeness. We asked an editor of the famous Guinness record books to fill us in on some of the most unusual sports champions of all time.

What's the matter, video athletes? Does the captain of the football team laugh at you because your muscles don't pop like the Incredible Hulk's when you make an electronic tackle? Does the local tennis star with the perfect lobs and the smashing serve say you're not built to backhand? Well what do they know!

Ever since David knocked out Goliath, we've known that the record-setting performance isn't always turned in by the perfect physical specimen. Crack open a copy of the *Guinness Book of Sports Records, Winners, and Champions* and you'll find a healthy number of tremendous physical specimens like seven-foot-tall Wilt Chamberlain, or rocket-armed pitcher Nolan Ryan with his 100-m.p.h. fastball. But you'll find plenty of unlikely characters as well—oddballs whose unequaled achievements earned them a place in the pages of sporting history . . . in one way or another.

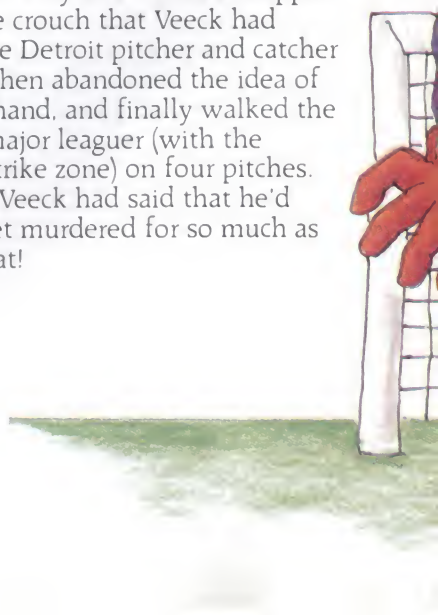
A SHORT BASEBALL STORY

One of these unusual Guinness record holders is Eddie Gaedel, as unlikely a major league baseball player as ever stepped up to the plate.

To understand how Eddie Gaedel got his shot at stardom, you first have to know something about the St. Louis Browns, a hapless American League team that eventually had to move to Baltimore and change its name to the Orioles to leave its bad reputation behind. The Browns were run by Bill Veeck (pronounced to rhyme with "wreck"), one of baseball's most daring promoters. But even Veeck had his hands full in the 1951 season. By August, the Browns were 37 games out of first place, and the stadium was full of empty seats. He needed to whip up some excitement for his ball club . . . and a little publicity wouldn't be unwelcome, either. That's where Eddie Gaedel came in.

On August 19, 1951, the Browns were in the second game of a doubleheader against the Detroit Tigers. The Browns sent a pinch hitter in as their leadoff batter to open the bottom half of the first inning—it was Eddie Gaedel, all 3 feet 7 inches of him. The 26-year-old 65-pound midget even had a special uniform, with the number "1/8" on it.

Needless to say, the Tigers tried to get him thrown out of the game. But Zack Taylor, the Browns' manager, produced a signed contract to prove that Gaedel was indeed a team member, and umpire Ed Hurley shouted "Play Ball!" Gaedel stepped up to bat in the crouch that Veeck had taught him. The Detroit pitcher and catcher discussed and then abandoned the idea of pitching underhand, and finally walked the smallest-ever major leaguer (with the smallest-ever strike zone) on four pitches. Browns owner Veeck had said that he'd have the midget murdered for so much as swinging the bat!



PHENOMENAL FOOTBALL FEAT

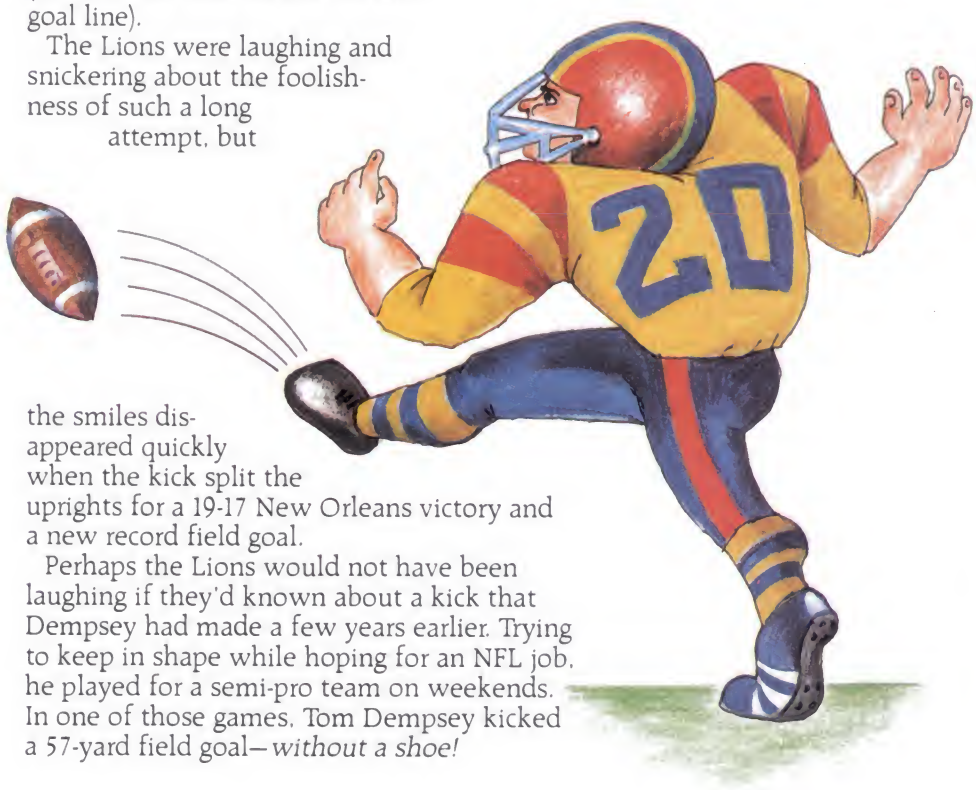
Being physically different from everyday folks isn't always the key to getting into the record book. In fact, sometimes it's an obstacle which makes the record-setting achievement even more amazing.

That's the case with one of the *Guinness* football records. The world's longest field goal measured an incredible 63 yards. It was kicked by Tom Dempsey of the New Orleans Saints, a man who was crippled from birth. He has one size 3 foot and the other size 10½, and only half a right arm. Yet with desire and determination, he made it to the NFL as a placekicker—even though he kicked with the crippled foot, on which he wore a specially made shoe.

Dempsey's historic kick came on the last play of the game on November 8, 1970. At the time the Saints trailed the Detroit Lions by 1 point, 17-16. Dempsey's holder prepared to spot the ball on the New Orleans 37 yard line, 63 yards away from the goal posts (which were then located on the goal line).

The Lions were laughing and snickering about the foolishness of such a long attempt, but the smiles disappeared quickly when the kick split the uprights for a 19-17 New Orleans victory and a new record field goal.

Perhaps the Lions would not have been laughing if they'd known about a kick that Dempsey had made a few years earlier. Trying to keep in shape while hoping for an NFL job, he played for a semi-pro team on weekends. In one of those games, Tom Dempsey kicked a 57-yard field goal—*without a shoe!*



TREMENDOUS SOCCER SUCCESS

Of course, being small isn't the only way to get into the record book—sometimes being enormous will do it. A longtime favorite of *Guinness* readers is Willie J. "Fatty" Foulke, the Englishman who, at 6 feet 3 inches and 311 pounds, was the largest goalie ever to play in international soccer competition. This awesome athlete had a temper to match his physique. He once picked up an opposing player by the heels in the middle of a game and stood him on his head. And on another occasion he stopped a game that was going against his team by swinging on the crossbar and snapping it!

One of his most noted exploits occurred off the field, however. It seems Foulke arrived early at the team's dinner table one evening. By the time the other players showed up, Foulke had already gobbled down the *entire team's food!*

WHY NOT YOU?

There you have it—official sports records set by three of the most unlikely athletes ever. So if you're not built for speed or strength, don't give up hope. With a lot of determination, you still might make it into the record book.

And if you're not willing to sweat and strain for athletic excellence, keep building up those joystick-pushing muscles and your trigger-finger reflexes. It's not there now, but someday there may be a Guinness record honoring the ultimate video game superstar. Who knows, it *could* be you!

STEPHEN TOPPING is Senior Editor and Sports Editor of the Guinness Book of World Records and the Guinness Book of Sports Records, Winners, and Champions.

the Clubhouse Store

Your Personal Hall of Fame. Who's tops in *Space Invaders?* What's your high score in *Super Breakout?* This official Atari Scoreboard displays your best scores for up to 9 games—just post them with the marker provided, then wipe them off and change them as you improve. A Velcro® tab holds the marker on the board. 10¾" x 14".

Item Code A50 $6.95

Available only from The Atari Club!

Is your Atari joystick wiggly, wobbly, or just not working? Now you can repair it yourself with the brand new Joystick Repair Kit. Each kit includes plastic insert, black outer cover for handle, printed circuit board, trigger springs, and easy-to-follow directions. A few minutes with a screwdriver in hand and your joystick is as good as new!

Item Code A70 $4.50

Only From The Atari Club! The best way to keep your Atari equipment neat and easy-to-reach—the Atari Organizer. Leave your game console in this handy roll-about unit—lift the cover and you're ready to play! Holds all your cartridges, game books, and controllers. Sturdy solid-core construction, smoked acrylic doors and dust cover. Measurements: height 20½", width 20", depth 11¼". Assembly required.

Item Code A43 $49.95

ALSO AVAILABLE

AC Adapter A01	$ 6.95
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CRAZY CLIMBER

only from the Atari Club

You are a daring climber trying to reach the top of a **crazy** building. There's a Mad Doctor, a dive-bombing bird, plummeting girders and rivets, and more obstacles trying to knock you down.

This is **Crazy Climber,** a tremendously popular arcade game, now a wonderful home game cartridge available **only from the Atari Club.** It will be several months at least till **Crazy Climber** reaches store shelves—it may **never** be released to the general public! But Club Members deserve special attention, and we're getting it!

Members who ordered in advance are already enjoying **Crazy Climber.** Now you can get in on the fun right away—just call 1-800-345-8600 (PA residents call 1-800-662-5180) or send in the enclosed mail order form.

Don't look for **Crazy Climber** at any store—only Atari Club Members can get this super new game, and only from the Club!

Just $26.95

CENTIPEDE

Alright, Centipede fans, get ready to blast your way to a terrific prize in this issue's Atari Club Contest. The Grand Prize for the top insect eliminator—the brand new Atari 1200 Home Computer! Now there's a prize worth shooting for!

RULES

1) You are allowed a total of 10 shots.

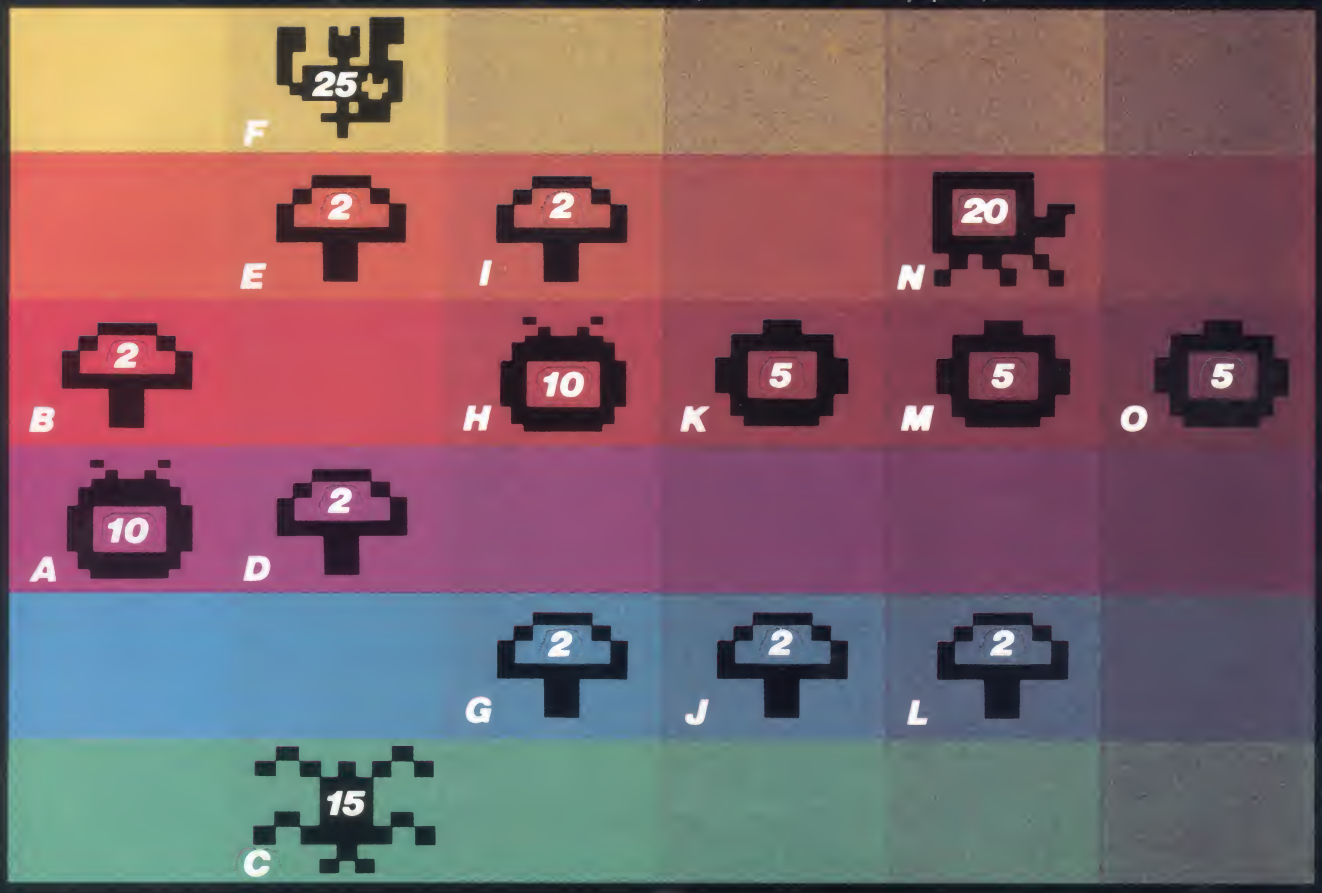
2) Each shot scores the number of points indicated on the bug or mushroom hit times the number of the shot that hit it. In other words, hitting the spider on your first shot would be worth 15 points (15 x 1). Hitting it on your second shot would be worth 30 points (15 x 2). Hitting it on your tenth shot would score 150 points (15 x 10).

3) Each bug or mushroom can be hit once and only once.

4) You can only hit a bug or mushroom if you have a clean shot at it—you must already have hit anything between your shooter and your target. That means that, if you want to hit the 20-point flea, you must already have shot away the 2-point mushroom and the 5-point centipede segment directly below it.

5) The entry with the highest total score is the Grand Prize winner. The next highest wins second prize—the ten next highest totals each win a third prize. For entries with equal total scores, a drawing will be held to determine the winners. In addition, a random drawing will be held from all entries received by the deadline date to select 200 fourth prize winners.

6) Entries must be received by April 30, 1983.



HOW TO ENTER:

Fill in the letter of each target you hit in order in the blanks provided on the Entry Form (or a facsimile). Indicate points scored for each shot and total points. Complete the order and entry forms and send them together in the envelope provided. YOU MUST WRITE THE TOTAL NUMBER OF POINTS YOU HAVE SCORED ON THE OUTSIDE OF YOUR ENVELOPE—if this is not done, your entry will not be accepted.

Final judging and drawings will be held on May 15, 1983, and the winner will be announced in the July/August issue of Atari Age. Contest void in Florida, North Dakota, Ohio, and West Virginia. Employees of Atari, Inc. and other Warner Communications companies and their families are not eligible to win. Decisions of the judges will be final.

Actual odds of winning will be determined by the total number of valid entries submitted. Based upon the number of actual entries submitted in the "Picture Clues Contest," the chance of winning a prize will be 1 in 300.

Estimated prize value: first prize, $900; second prize, $300; third prize, $50; fourth prize, $4.

PRIZES:

- One **FIRST PRIZE WINNER** will receive an Atari 1200 Home Computer!
- One **SECOND PRIZE WINNER** will choose any 10 Atari Game Program cartridges!
- Ten **THIRD PRIZE WINNERS** will each receive an Atari Organizer furniture unit!
- Two hundred **FOURTH PRIZE WINNERS** will each receive an official Atari Club mug!

COIN VIDEO CORNER

QUANTUM

Enter a totally new high-energy video game experience—enter the world of *Quantum*. Your goal in this challenging subatomic world—capture stray atoms while escaping destruction by deadly nuclear particles.

The *Quantum* screen is an abstract scene of brilliant color QuadraScan graphics. You use a Trak-Ball to guide a probe, or "sparkler," through the atomic field. Your probe leaves a trail behind it wherever it goes. Draw a complete circle around one of the nuclear particles and it explodes for big points!

The screen first fills with Electrons circling Nuclei. When a nucleus is snared and exploded, the electrons change into Positrons, worth extra points if you encircle them before they fly off the screen.

It's an absolutely unique challenge—and there's a special treat for arcaders who become *Quantum* masters. A player who beats the highest score to date can actually "draw" his signature or initials at the top of the high scorer's board using the probe!

XEVIOUS

We've played a lot of video games, but we've *never* seen arcade graphics as awesome as the eye-popping scrolling playfield of *Xevious*.

The game involves challenging three-dimensional warfare on *and* over the surface of the Earth. The Xevious people, who fled our planet before the Ice Age, have now returned to conquer it. They mount a fierce air attack, and have established bases on the surface as well—the Solvalou spacecraft you fly is under attack from the air *and* the land!

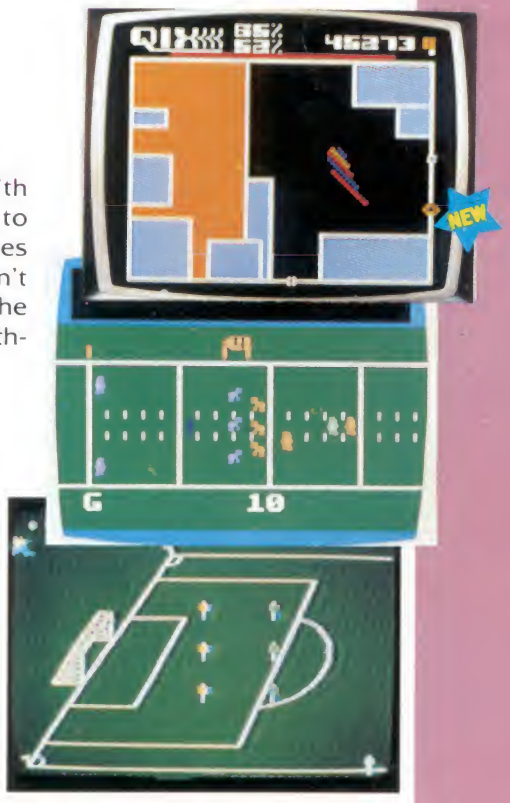
As you soar over the incredibly detailed planet surface, you encounter wave after wave of flying foes which you eliminate with rapid fire blasters. At the same time, ground targets are firing up at you. Line them up in your bombsight and fire away—but be quick! Thre are *lots* of enemy installations, and they have *you* in *their* bombsights too!

Xevious is a visual feast. As you continue on your mission, you encounter deadly spinning resistor shields, the magnificent Andor Genesis Mother Ship, and literally dozens of surprises. The on-screen images and animation are so beautiful they make *Xevious* almost as much fun to watch as it is to play . . . *almost*, but not quite!

OFFICIAL ATARI COIN VIDEO RECORDS

GAME	PLAYER	POINTS	DATE & TIME	LOCATION
Asteroids	Scott Safran	40,336,440	11/13/82 (53 hrs. 4 min.)	Newton, PA
Asteroids Deluxe	Kevin Gentry	2,117,570	12/29/81 (5 hrs. 25 min.)	Lake Charles, LA
Battlezone	Ken Chevalier	12,009,000	2/20/82 (12 hrs.)	Atascadero, CA
Centipede	Darren Olson	15,207,353	10/15/82	Calgary, Alberta, Canada
Dig Dug	Shawn Dybdall	12,822,460	9/28/82 (8 hrs. 16 min.)	Las Vegas, NV
Gravitar	Raymond E. Mueller	4,722,200	12/4/82 (12 hrs. 21 min.)	Boulder, CO
Kangaroo	Ken Vance	411,200	10/31/82 (2 hrs. 27 min.)	Las Vegas, NV
Missile Command	Ron Kussman	63,983,475	6/20/82 (45 hrs. 30 min.)	Upland, CA
Space Duel	Ken Vance	482,620	10/31/82 (1 hr. 46 min.)	Las Vegas, NV
Tempest	Ken Vance	4,999,993	11/8/82 (3 hrs. 5 min.)	Las Vegas, NV
Warlords	Peter Skahill	911,875	8/29/82 (45 min.)	Los Angeles, CA

5200 FLASH



Not everybody likes to play Atari 5200 games with friends—some folks prefer having the machine all to themselves. So if you're one of those people who likes to play alone, we're giving you fair warning—don't show anybody your new **Baseball** cartridge. Keep the door shut when your spacecopter takes off for a death-defying mission in 5200 **Vanguard.**

Play 5200 **Tennis** against the computer—don't let anybody else get a glimpse of that life-like gameplay.

And for heaven's sake, control yourself when you play **Qix,** the unique arcade game that Atari just brought home in a version that looks identical to the coin-op classic.

The minute you invite somebody in for a game, you'll never get rid of them! And they'll call the rest of the family in to see, and then your friends will want a turn, and before you know it, you'll have a regular party going!

That's the problem with Atari 5200 games—**everybody** wants to play them!

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Atari 5200 (comes with **Super Breakout** cartridge) Item Code A60 $249.95

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Football	Item Code G08	$31.95	BASEBALL (available April)		
Galaxian	Item Code G01	$39.95		Item Code G11	$31.95
Missile Command	Item Code G02	$31.95	TENNIS (available April)		
Pac-Man	Item Code G06	$39.95		Item Code G12	$31.95
Soccer	Item Code G05	$31.95	VANGUARD (available May)		
Space Invaders	Item Code G03	$31.95		Item Code G13	$39.95
Star Raiders	Item Code G04	$39.95	QIX (available March)		
Centipede	Item Code G09	$39.95		Item Code G14	$31.95

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CENTIPEDE

100 feet of fun!

Fast and furious bug-blasting action in a garden where the insects try to exterminate *you*—that's *Centipede!*

Your shooter waits at the bottom of the screen, as the centipede scoots back, forth, and down toward you through the mushroom-dotted screen. Hit the descending centipede sections. Dodge the sneaky spiders, or shoot them for extra points. Quick—blast that scorpion! It's poisoning a whole row of mushrooms. And here comes the flea, adding still *more* mushrooms to the screen!

All the lightning-fast authentic arcade action of *Centipede* now in your own home—only from Atari!

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